Strategy Research Project

NATIONAL HEALTH-CARE REFORM

BY

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USAWC STRATEGY RESEARCH PROJECT

NATIONAL HEALTH-CARE REFORM

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NATIONAL HEALTH-CARE REFORM

> …absent policy actions aimed at deficit reduction, the federal government faces unsustainable growth in debt. Such growth would inevitably result in declining GDP and future living standards. Even before such effects, these debt paths would likely result in rising inflation, higher interest rates, and the unwillingness of foreign investors to invest in a weakening American economy. Furthermore…growth in spending on major entitlement programs and the interest on national debt will absorb the lion's share of the government's resources. Just 10 years from now [2008]…76 cents of every dollar of federal revenue will be spent on retirees and their health-care providers, health-care providers for the poor, and our bond holders. This leaves little room for other priorities, such as national defense and investment in infrastructure and alternative energy sources and threatens the government's fiscal ability to respond to national emergencies, both natural and manmade.[1]
>
> —U.S. Government Accountability Office

The rising cost of health-care threatens America's ability to defend itself, invest in infrastructure, and respond to national emergencies. This paper lays out the reasons America needs health-care reform, identifies key health-care interest groups, summarizes the major components of proposed reform plans, and identifies missing components of the reform plans. Supporting the case for reform is a perfect storm of demographics, health-care cost growth, national economic woes, ineffective government, poor healthcare outcomes, and presidential campaign promises. Standing against reform are influential health-care interest groups, who have impeded successful reform in the past. Understanding their needs and collaborating with these interest groups is necessary for effective reform. The Obama administration has several viable reform plans available to guide reform efforts. Common components of these health-care reform plans include establishing a federal health care board; providing universal coverage for all Americans; standardizing coverage benefits; working to increase the value of care provided; making substantial investments in enabling infrastructure; and

giving a greater share of health-care responsibilities to the government. Whether these plans will work depends on the Obama administration's ability to address the needs of key interest groups as well as the elements that are missing from these plans. Critical elements that are absent from proposed health-care reform plans include national performance measures, controls for technology insertion, influencing lifestyle choices, reforming medical education, overcoming political inertia, and dealing with the interdependence of the healthcare industry and the nation's economic well-being.

A Perfect Storm

Demographics. The major cause of fiscal challenges will be Medicare and Medicaid costs.[2] The first members of the baby boom generation began retiring and collecting Social Security benefits in 2007. They will be eligible for Medicare and Medicaid benefits in 2010. In the next twenty years, 80 million Americans will become eligible for Social Security and Medicare.[3] Aging America will likely suffer the same economic consequences that plague Europe and Japan. There, slower employment growth due to a shrinking work force has created a stagnant Gross Domestic Product (GDP) and the cost of paying for pensions and health coverage has restricted expenditures on defense, economic, and social priorities.[4] This impact will fall heavily on America's national defense. Over the past 42 years, defense spending has declined to accommodate the increasing health and social security costs.[5] Health-care cost combined with these demographics presents a formidable challenge to the nation.

Health-care cost growth outpaces GDP growth. Costs are growing faster than tax revenues. For more than thirty years, health care spending per capita has grown and will continue to grow about 2.5 percent faster than average annual GDP per capita.[6]

This means Americans are using a greater proportion of the nation's tax revenues to finance health-care. Comparing U.S. health-care expenditures against other nations and U.S. inflation figures helps to understand the extraordinary magnitude of these costs.

Former President Bush acknowledged that the greatest challenge to the federal budget is entitlement spending and stated that by avoiding the problem we make the solution more difficult, unfair, and expensive.[7] Currently, America spends one in every six dollars on healthcare needs or $7,026 annually per person.[8] Proportionally, that is 50% more per capita than the next most expensive country in the world, Switzerland.[9] Health-care insurance costs exceed the national average inflation. From 2000 to 2007, health insurance costs increased 96.2 percent while inflation increased 21.1 percent.[10] In 2009, Social Security, Medicare, and Medicaid entitlements will cost $1.636 Trillion or 53% of federal outlays.[11] This level of spending leaves little funding for other national interests. This excessive cost growth begs the question – what is driving health-care cost growth?

Drivers of cost growth include the increased use of new and existing medical technology; inadequate information on medical outcomes, quality of care, and cost; and a growth in lifestyle choices, such as obesity, that can lead to expensive chronic conditions.[12] Why do Americans allow these costs to continue to grow? Part of the answer is ineffective government.

*Ineffective Government. C*osts rise unchecked in part because there is no single government entity in charge of federally funded health care. The federal government provides or funds care for 109 million people and accounts for 32% of the nation's health-care expenditures. [13] Unfortunately, because of poorly integrated legislation,

policy, and management, federally funded health-care programs provide widely disparate benefits, quality standards, and have little success at cost containment.[14] A single government entity to oversee the health-care system would make policy on the use of new and existing drugs, treatments, and procedures for all federally funded health-care. This policy would be fairly determined through a process of rational, transparent decisions subject to structural checks and balances but largely insulated from interest groups and political influence.[15]. Having one single government entity in charge of health-care could improve the effectiveness of federally funded health-care.

The logical government leader should be the Department of Health and Human Services (DHHS). However, DHHS has been largely unsuccessful at controlling costs. The Centers for Medicare and Medicaid (CMS), a part of DHHS, is the largest payer of federal health care costs. With a total annual budget of over $650 billion, the Centers for Medicare and Medicaid (CMS) administer the Medicare, Medicaid, and State Children's Health Insurance Program (SCHIP) programs. These programs finance healthcare for 90 million Americans.[16] A look at the dire state of Medicare funding demonstrates the inability of DHHS to control costs.

In 2008, the trustees of the Medicare Federal Hospital Insurance (HI) Trust Fund, or Medicare Part A, called for decisive policy action to achieve long-term solvency of the trust fund. For the third year in a row, the trustees also issued a Medicare funding warning. This warning tells America's leaders that they going to spend a substantial share of federal revenues to pay for Medicare.[17] In 2007, benefit payments exceeded the program's tax revenue. In 2011, as benefits exceed payroll taxes and trust fund interest, the Medicare Part A Trust Fund begins tapping into its principal balance, which

will be completely depleted by 2019.[18] The failure of CMS-DHHS to control cost growth is an indicator of ineffective government. Demographics, cost growth, and ineffective government contribute to the huge national debt that is at the heart of the nation's economic woes.

National Economic Woes. As of December 9, 2008, the nation has debt of $10.3 Trillion (T) and a GDP of $14T.[19,20] Substantial budget deficits are forecast through 2012 that will bring the national debt to well above the current level of 72% of GDP.[21] The last time the U.S. national debt was 72% of GDP was 1951 when the nation was paying off the debt accrued during WW II.[22] In September 2008, Congress raised the national debt limit to $11.615T and authorized use of the borrowed funds to prevent an economic collapse of the nation's banks.[23] This huge debt means that by 2040, without corrective action, America's interest payments on debts owed will exceed annual tax revenues.[24] While the on-balance sheet debt situation is grave, the nation's off-balance sheet debt for Medicare and Social Security paints an even graver picture.

The GAO estimates that the cost of Medicare and Social Security will exceed the payroll taxes and premiums that pay for the benefits by more than $40 trillion over the next 75 years. [25] These on and off balance sheet debts will cause the Nation's debt levels to more than triple by 2040 (WWII peak was 109 percent). This debt might be acceptable if the nation was getting something for its high health-care costs, for example, universal coverage, lower infant mortality, or longer life spans. Unfortunately, Americans are paying too much and getting lousy health-care outcomes.

Poor Health-care Outcomes. Industrialized nations of the world measure health-care in terms of cost, access, and outcomes. Despite having the world's highest per

capita spending on health-care, there are 47 million uninsured and 25 million underinsured Americans.[26] In America, having health insurance equals access to care and because of a dramatic decline in employers providing health insurance the uninsured and underinsured numbers will continue to grow.[27] This lack of access shows up in global measures of health.

Despite high per capita spending, Americans rank 46th in lifespan and 60th in infant mortality rates.[28] These ranks are far behind most industrialized nations. In 2006, a landmark study by the Institute of Medicine (IOM) that found that,

> (1) Between 44,000-98,000 Americans die from medical errors annually. (2) Only 55% of patients in a recent random sample of adults received recommended care, with little difference found between care recommended for prevention, to address acute episodes or to treat chronic conditions.(3) Medication-related errors for hospitalized patients cost roughly $2 billion annually (4) 41 million uninsured Americans exhibit consistently worse clinical outcomes than the insured, and are at increased risk for dying prematurely (5) The lag between the discovery of more effective forms of treatment and their incorporation into routine patient care averages 17 years (6) 18,000 Americans die each year from heart attacks because they did not receive preventive medications, although they were eligible for them (7) Medical errors kill more people per year than breast cancer, AIDS, or motor vehicle accidents (8) More than 50% of patients with diabetes, hypertension, tobacco addiction, hyperlipidemia, congestive heart failure, asthma, depression and chronic atrial fibrillation are currently managed inadequately.[29]

The facts lead to a clear conclusion – Americans are paying too much for bad care. President Obama was elected, in part, because he promised to do better for the American people.

Presidential Campaign Promises. President Obama was elected on a promise that he would reduce health insurance costs by $2500 per year per voter.[30] Keeping that promise means, he will have to pursue some sort of change to the existing health-care system. His credibility and chance for a second term depend, in part, on his ability to

keep his campaign promises. Consequently, his promises have become part of the perfect storm for health-care reform. The means to fulfill this promise are embedded in the health-care reform proposals discussed later in this paper. In order to support reform President Obama can either raise taxes or divert federal revenues from other sectors of government to fund the changes that will lower health insurance costs. The latter approach is most likely because voters are unlikely to support any tax increases during a recession. The President's credibility is tied to keeping his campaign promise and provides a strong incentive for him to implement reform. It is clear that maintaining the status quo will not reduce health insurance costs.

So, what is a nation to do? America's aging population will soon add 80 million people to the rolls of those eligible for federally funded health-care. Add this fact to health-care cost growth and crushing national debt, the result is substantial national economic woes. Add ineffective government, poor healthcare outcomes, and presidential campaign promises to the equation and you get a convincing case for reform.

Interest groups and health-care reform

Before examining plans for national health-care reform, it is important to identify interest groups and understand their impact on past reform efforts. Interest groups include, but are not limited to: health-care providers, hospitals, nursing homes, insurers, employers, labor unions, states and localities, taxpayers, medical equipment manufacturers, medical suppliers, pharmaceutical producers, pharmacies, patients, malpractice attorneys, and the executive, judicial, and legislative branches of

government. These separate groups, acting in their own self-interest, have created the health-care structure that exists today.

Conflicting interests between interest groups complicate reform efforts. This is because most solutions ultimately reduce someone's current benefit from the current system. Interest groups frequently have competing and sometimes irreconcilable interests.[31] Patients want the most healthcare for the least cost. Providers want to maximize income or revenues. Congress wants to satisfy constituents. Taxpayers want less taxes or greater benefits from the taxes paid. The executive branch must facilitate quality healthcare with available funding. Industry must satisfy shareholders. These competing interests make it difficult to find a solution that satisfies all interest groups. For example, CMS's Sustainable Growth Rate system was designed to limit the growth in physician payment levels. However, because Congress has overridden the payment reductions recommended by CMS, spending for physician services has grown at more than 9% per year.[32] In this instance, Congress supported the interests of physicians over those of the taxpayer.

This story of conflicting interests repeats itself throughout reform efforts in the 20th and early 21st century. Those with an adversely impacted financial interest fought aggressively against a change to the status quo. Opponents to reform have primarily been physicians, business leadership, and insurance companies. To prevent a loss of income, these groups have used tactics such as stoking fears of socialism and communism to thwart reform.[33] For reform to succeed, both public and private support must be strong enough to tolerate the inevitable disruptions that real change will bring. Only this ubiquitous level of support will sway the interest groups from accepting only

pain-free reform. It is critical that policy makers understand and address the effects that proposed reform policy has on interest groups in order to avoid the mistakes past of past reforms.[34]

Reform Proposals

Reform plans proposed by American leaders and organizations have several major elements in common. The proposals come from former Senator Tom Daschle and colleagues in *Critical: What We Can Do About the Health-Care Crisis* (Daschle Plan); Senator Max Baucus, Chairman of the Senate Finance Committee, in his proposal "Reforming America's Health-care System: A Call to Action" (Baucus Plan); the Committee for Economic Development's (CED) 2007 report on "Quality, Affordable Health-care for All: Moving Beyond the Employer-Based Health-Insurance System" (CED plan); and Ezekiel Emanuel and Victor Fuchs in a Brookings Institute report, "A Comprehensive Cure: Universal HealthCare Vouchers" (Emanuel-Fuchs Plan). These plans advocate funding the reform with expenditure limiting, dedicated tax mechanisms, rather than annual congressional appropriations. The plans address access, outcome, and cost issues in fundamentally similar ways; and each increases the value of health-care through the simultaneous and synergistic application of access, outcome, and cost control measures.

The plans have six major elements in common: create a federal health care board; provide a variety of options for coverage that will ensure universal coverage; define a standard coverage or benefits package; increase the value of the care provided; put in place infrastructure that will enable quality, value based healthcare;

share the responsibility among the players in the health arena with government shouldering a greater share.

Federal Health-care Board. Reform plans advocate creation of an independent Federal Health Board (hereafter referred to as the Board) modeled on the Federal Reserve System.[35] Proponents assert that an independent board would eliminate the short-term perspective of politics and self-interest, centralize health-care policy, and effectively integrate cost effective technology. The Board would develop standards for a health system that ensures quality outcomes for all Americans at an affordable cost.[36] Although these standards would apply to federal health programs, they could serve as a model for private insurers.[37] Because its structure serves as the foundation for the Board, it is important to discuss the characteristics of the Federal Reserve that the Board would adopt.

Congress formed the Federal Reserve in 1913 with a very vague charter - to prevent the bank runs and panics of the past. The Reserve's mission, structure, authority, and autonomy have evolved over the past century.[38] The Board would mirror the decision processes used by the Federal Reserve and develop policy solely based upon economic, social, and legal merits.[39] Like the Reserve, the Board would be independent but politically appointed. The Board would establish the reformed health-care system's framework and provide the details necessary to implement the system; much like the Reserve does with the U.S. banking system. Similar to the Reserve's ability to adapt policy to the ever-changing economic landscape, the Board will be more adaptive to the needs of the population served and reflective of the inevitable changes in healthcare practice, technology, and benefits. In forming a Board that can flexibly

adjust to the needs of the nation, legislators and the executive branch will avoid the error of defining a health-care system in legislation that might work today but perhaps not in the future. This error was partly responsible for the demise of the Clinton health-care reform plan.[40] These general characteristics would serve to guide the Board in accomplishing its specified tasks.

A board of governors (BOG) will lead the Board. The BOG will have responsibility for overseeing the other five common elements of reform and would be composed of appropriate experts whose experience will lend credibility to their policy decisions.[41] The President would appoint BOG members to staggered ten-year terms and the Senate would confirm them.[42] Long terms ensure continuity and sustain the level of institutional knowledge. There would also be regional boards composed of individuals with similar expertise but charged with execution of national policy.[43] The Board would not be a regulatory agency but rather a mandatory policy setting body that would dictate one set of policies for all federally funded health-care. The Board's primary role would be to create a framework for universal care, standardized benefits, and provide a single entity to recommend treatment and coverage policies for the nation, thus eliminating the current fragmented process of having many agencies developing separate policies.[44]

Universal Coverage. The second common element of reform is to ensure universal coverage of all citizens. The United States is the only wealthy industrialized nation that does not ensure that all citizens have health-care coverage.[45] There are three critical components of universal coverage: the payment mechanism, risk adjustment, and choice. First, each plan advocates either a government controlled single-payer system or a government subsidized voucher system that enables all

workers to access health insurance privately, through their employers, or through the federal government. Second, integral to universal coverage is the concept that any plan implemented must provide insurers a risk pool adjustment to compensate insurers of the sickest individuals. Third, underlying the foundation of universal coverage is the concept that individuals will still have some level of choice, though the focus is on choice of health plan instead of choice of individual providers. The most contentious of these three components is the choice of payment system. Because of the contentiousness of this component, further elaboration is necessary.

Most of the world's highest-ranking health-care systems provide universal coverage through a single payer system.[46] The overarching goals of a single payer system are to provide universal coverage, maintain choice, reduce administrative costs, and promote good insurer practices.[47]Under this system, the government directly or through insurers pays for healthcare. America could implement a single payer system by building on the existing framework of employer-based insurance, federally funded healthcare (Medicare, Medicaid, SCHIP), and expanding the Federal Employee Health Benefits Program (FEHBP).[48] The Board would set the rules for the expanded FEHBP and define the rules for participation.[49] In order to ensure universal coverage, the government would provide needs based subsidy for enrollment and provide tax credits for those whose insurance exceeds a certain percent of income.[50] The single payer plan would expand Medicaid to cover persons earning below a certain income level, relative to the federal poverty level.[51]

Standardized Coverage Benefits. The third common element of reform advocates defining a standard coverage or benefits package similar to that offered by the FEHBP.

Defining coverage would eliminate the coverage gaps suffered by many Americans who have insurance but still take on staggering debt because their insurance does not cover their injury or illness. A basic health-care benefits package would include basic, preventive, dental, and mental health-care.[52]

Increase the Value of Care Provided. Increasing the value of care means, controlling costs while improving outcomes. This fourth common element of reform increases the value of care in four ways; changing payment incentives, rationalizing reimbursement rates, developing national clinical guidelines, and enacting tort reform.

America must move from a fee-for-service system to a system based on payment incentives tied to cost effective, positive health-care outcomes for patients. Presently, financial incentives are misaligned because of two reasons: marketing influences from pharmaceutical and equipment manufacturers, and a failure to tie healthcare outcomes to reimbursement rates.[53] Under the current system, healthcare providers are financially incentivized to provide more care, use more supplies, buy more equipment, and prescribe more drugs. Providers are paid whether or not they heal the patient. In essence, they can create the demand and provide the supply. The more demand they create, the more money they make thus the focus of care is often volume. The first step in moving from fee-for-service to an outcome based payment system is to rationalize reimbursement rates.

Complicating the payment system are irrational reimbursement rates that vary widely but are unrelated to outcomes. Reimbursement is based primarily on what value the third party places on the care and the level of reimbursement a physician is willing to accept.[54] There is virtually no way for patients or payers to link cost and outcomes; no

way for them to know if they are getting a good deal.[55] A recent study found that the cost of comparable heart bypass surgery ranged from $20,000 to $100,000.[56] By publishing data on cost and outcomes for hospitals and providers, the Board could link costs to outcomes. This link would empower health-care consumers.[57] Properly informed consumers would be able to see who provides good care at a reasonable cost. This should bring patient outcomes into the reimbursement equation and incentivize health-care providers to reorganize medicine around primary care management of chronic disease and illness.[58] The focus of care will be quality outcomes rather than volume of care. This interactive open market process should bring rationality to reimbursement rates.

The second way to increase value is to create and expand the mission of an organization similar to the U.K. National Institute on Clinical Excellence (NICE). NICE develops evidence based clinical guidelines for the management of chronic illness.[59] These clinical guidelines could enable the Board to match incentives with practitioner behavior that leads to quality healthcare and eliminates unnecessary care.[60] Most medications or therapies are judged first for safety and then for efficacy but not at all for cost effectiveness.[61] Using cost data, clinical guidelines, and outcomes assessment to choose what it will cover and how much it will pay, the federal government can direct providers to the safe, efficacious, and cost effective therapies. This approach does not rule out spending money on expensive new technologies that benefit patients, but it should reduce the money wasted on ineffective, poor quality care.[62] In the end, the combination of rationalizing reimbursement rates and developing clinical guidelines

should improve health-care outcomes and consequently change payment incentives by rewarding proper management of chronic illness and preventive care.[63]

As an example of a properly aligned reimbursement system, consider the story of HealthPartners. This company paid a bonus to physicians whose diabetic patients reduced blood sugar, cholesterol, smoking, and took aspirin daily.[64] Because of the bonus, they were able to raise the percentage of patients with controlled diabetes from 5% to 17%, and lower the overall cost of diabetic care. Using a similar incentive for cardiologists, they saved $30,000 per patient in health-care costs.[65] The results were better outcomes and lower costs.

The third leg in improving the value of care is to implement Tort reform (malpractice) through a Center for Patient Safety and Dispute resolution.[66] This Center would adjudicate patient complaints and compensate patients when their injuries are due to medical error. The Center would also be empowered to discipline, disqualify, and prohibit health practitioners from providing care. Patients would retain a right to sue after completing the Center's adjudication process. Largely, the center would end malpractice suits and costly defensive medicine.

Infrastructure. Enabling infrastructure is the fifth common element of reform. Building infrastructure entails a substantial national investment in information technology (IT) and an electronic health record (EHR). These vital enabling tools are needed to achieve cost control, access, and outcome goals. America could save $77.8B each year by using an electronic health record (EHR) that links laboratories, ancillary care centers, pharmacies, and health-care locations.[67] By providing a means for provider collaboration and accountability, the management of chronic illness and end of

life care will be improved. For example, an EHR that is available to all physicians treating a diabetic patient with multiple complications could reduce costs by saving time, reducing duplication of tests, ensuring availability of patient records, reducing medication errors, and improving the efficiency of reimbursement mechanics.

IT and EHR enables other reform plans elements. Public health officials could utilize the EHR to track trends, evaluate the safety, efficacy, and cost effectiveness of a wide range of therapies and pharmaceuticals.[68] Consequently, investment in IT and EHR will facilitate development of evidenced based medical practices that will eliminate costly, ineffective, and inefficient care. The IT and EHR investments should also reduce administrative costs, fraud, waste, and abuse in the reimbursement system, and facilitate transparency of health-care costs. Unfortunately, implementing and enforcing use of a nationwide health-care IT and EHR infrastructure can only be accomplished at the national government level. Thus, the success of the infrastructure investment implicitly requires greater federal government involvement in the health-care system.

Sharing Health-care Responsibilities. The sixth and final element of reform advocates a shared responsibility among the interest groups in the health arena with government shouldering the greatest share. Given the diversity of actors in the healthcare arena, the federal government is the only actor with enough influence to compel improvements in cost control, access, and outcomes. Between Medicare, Medicaid, SCHIP, the Veterans Affairs Department, Department of Defense, and Indian Health Service more than 100 million Americans (over one third) have care managed or funded by the federal government.[69] The government can weld its clout by setting a standard benefits package, computerizing health records, linking pay to performance,

and developing a process for assessing the value of tests, treatments, and procedures that will be the model for a value-oriented health-care system.[70] The change to a unified set of standards by the government is the force that will drive change in healthcare practice.[71]

The government can extend access to this model through an expanded FEHBP insurance pool that individuals, employers and insurers can participate in, but only if they follow federal rules on coverage and cost.[72] Individuals will have to enroll in a basic health care plan or suffer a tax penalty.[73] While the government can play a central role in reform of the health-care system, success hinges on the consensus of the nation and buy-in from all the actors on the health-care stage. Success also hinges on more complete reform plans.

What is Missing from the Reform Plans?

The six common elements of reform provided a sound, but incomplete foundation for fixing the cost, access and outcome flaws in the health-care system. None of the plans provided specific recommendations for national performance measures. Despite identifying overuse of technology as a significant cost driver, none of the plans addressed controlling the use of technology. The plans identified lifestyle choices like obesity and smoking as major cost drivers but did not recommend measures that would change lifestyle choices. Instead, recommendations focused on treating the consequences of lifestyle choices. None of the plans addressed the shortage of physicians caused by the absence of health-care workforce policy. This shortage will create a dire need for medical education reform. None of the plans addressed overcoming political stagnation. They failed to explain how Americans could get the

executive and legislative branches to make meaningful progress towards health-care reform. Finally, none of the plans addressed the interdependence of the health-care industry and America's economic well-being.

Performance Measures. It is a myth that Americans with health insurance get the best healthcare in the world.[74] Reform plans prescribe creating an organization that defines the best practices of medicine and measures individual patient outcomes. Unfortunately, the plans stop short of recommending more global outcome measures. Their performance measures tell whether we have better cared for Americans but not if we have a healthier America. Measures that reflect national objectives are necessary and should be measures like greater longevity, increased productivity at work and leisure, lower overall cost to the nation, and decreased infant mortality.

America falls far behind all industrialized nations in nationwide measures of outcomes such as infant mortality, same day access to care, treatment of common cancers, mental illness treatment, long-term care, and equitable care for minorities.[75] These aggregate, overarching measures reflect the cumulative efforts of different types of individual care. For example, infant mortality is a reflection of pre-natal care, post-natal care, and pre/post partum care during delivery. America should select measures that reflect the health-care goals of the nation.

As an example, the Healthy People 2010 initiative tracks overarching measures as well as their economic costs to the nation such as: physical activity, overweight and obesity ($99 Billion(B)); tobacco use ($50B); substance abuse ($277B); responsible sexual behavior (adolescent pregnancy $15B, sexually transmitted diseases $17B); mental health ($150B); injury and violence (motor vehicle crash $150B); and

environmental quality ($50B).[76] Similar measures are developed and tracked by the World Health Organization, CIA Fact Book, National Center for Health Statistics – Centers for Disease Control and Prevention, Centers for Medicare and Medicaid, Organisation for Economic Cooperation and Development (OECD) and the Institute of Medicine. These measures are readily available and should be the foundation of any reform plans. Consensus on the measures amongst the interest groups will shape the reform plans.

Controls for technology use. Most of the growth in Medicare expenditures is not because the Medicare population is growing. The growth mainly occurs because they are getting more medical care per person than ever before. This greater quantity of care per person is due to the uncontrolled use of new medical technology.[77] As long as no harm is done, Physicians are free to try any means available to treat the patient, regardless of effectiveness. The fee-for-service healthcare system reinforces this freewheeling practice by providing an incentive for practitioners and technologists to develop better methods and equipment for health-care. Regardless of what they prescribe, they are paid. This arrangement has a positive and negative side. On one hand, patients sometimes get treatments that cure the formerly incurable, on the other hand the cost of healthcare rises and patients often receive care they did not need. Balancing the incentives for innovation, technology use, cost, and effectiveness is a substantial leadership challenge. The question is how do we balance these needs? One answer would be to empower a federal health-care board to control the introduction of new medical technology.

Related to the issue of controlling technology use is the understanding that the government is, in part, responsible for the high cost of technology. The Food and Drug Administration (FDA) licenses pharmaceuticals, biologics, and medical devices. Producers of medical technology must obtain approval from the FDA before marketing to the public. In the current environment, the FDA is very risk averse and consequently requires an extremely high level of assurance on safety and efficacy measures. This one-sided mindset drives the cost of development to extreme levels. Currently, the cost to develop a biopharmaceutical drug is on average $559 million and can take over 7 years to obtain FDA licensure.[78] This cost passes directly to the health-care consumer. While safety and efficacy should remain the pre-eminent concern of the FDA, assisting manufacturers to reduce the time and cost of bringing innovation to the market should be added to its mission statement.

Lifestyle Choices. It is clear that lifestyle choices are major contributors to health-care cost growth. As the cost of care rises, elected officials may find that the healthy public is less willing to subsidize those with poor health that is due primarily to lifestyle choices.[79] If public willingness to subsidize poor lifestyle choices declines, then it will be time to tie personal lifestyle choices to consequences.

It is clear that the health-care system is not effectively changing lifestyle choices. Reform plans assumed that better patient education and management could motivate voluntary changes in lifestyle behavior; this assumption is discredited by current measures of lifestyle choices like obesity. While managing care by chronic conditions has driven modest adjustments in lifestyle choices the case for tying lifestyle choices to

consequences can be made by considering the obesity epidemic, its' links to diabetes, and their combined impact on health-care costs in America.

Overweight and obesity lead to higher death rates and are major contributors to many preventable causes of death.[80] Obesity is caused by interaction between social, behavioral, cultural, environmental, physiological, and genetic factors.[81] Therefore, in most cases, obesity is a lifestyle choice. Despite this knowledge, half of adults in the United States are overweight or obese, and the percentages are climbing higher. To make matters worse, the number of overweight children and adolescents has risen over the past four decades.[82] The rise in the obese population is reflected in health-care costs, especially in the cost of treating diabetes.

Obesity related diabetes has a major impact on the cost of health-care in America.[83] Obesity and overweight substantially raise the risk of illness from high blood pressure, high cholesterol, type 2 diabetes, heart disease, and stroke.[84] Between 1987 and 2001, obesity related care accounted for 27% of the cost growth in America.[85] In 2002, U.S. health-care expenditures were $865 billion, of which people with diabetes incurred $160 billion, and per capita medical expenditures totaled $13,243 for people with diabetes versus $2,560 for people without diabetes.[86] Primarily an adult population with diabetes causes these costs, but the incidence of type 2 diabetes in obese adolescents has risen tenfold over the past twenty years.[87] As this adolescent population ages the economic cost of obesity could mean the difference between solvency and bankruptcy for Medicare, Medicaid, and SCHIP.[88] It could also prevent universal health coverage and divert funds from other social needs.[89]

Given that lifestyle choices can be tied directly to health-care cost growth, it makes sense and seems fair to put in place a system that rewards those making healthy lifestyle choices and penalizes those making poor choices. America currently levies heavy sales taxes on tobacco, perhaps taxes on fattening foods or similar disincentives would modify America's lifestyle choices. If not, they would at least ensure that those making poor choices are subsidizing the increased health care costs that result from those choices.

Medical Education Reform. The Association of American Medical Colleges warns that the nation may have too few physicians to meet projected needs.[90] The forecasted shortage of physicians does not reflect misguided public policy but a near absence of policy.[91] In the medical workforce policy arena, self- interest and political disinterest maintain status quo workforce policies and hinder desperately needed change.[92] The American Medical Association (AMA) and the Council of Graduate Medical Education (COGME) are two key influencers of health-care provider education. Since 1980, the AMA and the COGME have restricted the supply of physicians through policy and advocacy actions.[93] They now recommend training 15% more physicians per year; unfortunately, by limiting the number of physicians trained they have created a shortage of providers. A second order impact is that no new medical schools have opened since the 1980's.[94] Thus, at a time when the AMA is recommending training 15% more physicians per year, the capacity to do so does not exist.[95]

Training more physicians in time to meet the demand will be difficult. Congress (with the input from the AMA and COGME) controls the number of residencies that are funded annually. The federal government, through Medicare funding, pays for most of

the medical residencies that train physicians. In order to train more physicians Congress must provide more funding for education and allow creation of new medical schools. Even with additional funding, because of the ten-year lead-time to train a physician, the nation will likely be short 85,000 or more physicians by 2020.[96] Regrettably, simply increasing the number of physicians will not solve the problem. America also has a problem with what specialty the physician practices and where they practice.

Physicians choose their specialty based on salary.[97] Salary also drives their choice of where to practice medicine.[98,] The result is that physicians are poorly distributed across the nation.[99] This creates many underserved and over served populations. Simply creating a larger supply of physicians will exacerbate this situation. In fact, in over served areas it will lead to an increase in expensive and marginally useful services that fail to improve health outcomes.[100] Given these facts, it is unlikely that physicians acting in their own self-interest will migrate to the most needed specialties, in the most needed locations. Therefore, policy must address supply, specialty choice, and the geographic location of where physicians practice.

Though federally funded graduate medical education (GME) is inextricably coupled to the supply and specialties of health-care providers, it does not influence the geographic distribution of providers. Currently, teaching hospitals receive GME Medicare funding in the form of higher reimbursements for patient care. Consequently, there is no direct link between this reimbursement and the geographic distribution of the medical residents themselves. Once they graduate from residencies, physicians are free to locate where they please. The mal-distribution of providers could be addressed by connecting the Medicare funding directly to the medical residents. Medicare could

pay their salaries, instead of the teaching hospital. Medicare could then require that they serve in geographically un-served or underserved areas as a requirement for receiving the Medicare reimbursement. Since studies have shown that having a greater percentage of physicians in primary care specialties is associated with better population health, consideration to funding training for more primary care providers should be of paramount concern.[101] Therefore, America needs to not only train more medical professionals, but also distribute the right specialties to the right locations.

Without immediate action, the shortage of health-care providers combined with the mal-distribution of providers by location and specialty will hinder any effort to reform health-care in America.[102] Most other developed countries couple public planning of the clinical workforce to the public funds that pay for medical education[103] In addition to a Federal Health Board, reform plans could create a health workforce planning commission that would govern the supply, specialty, and locations of health-care providers.[104]

Political. The greatest risk to successful implementation of reform comes from the political arena. Reformers have made some very optimistic assumptions about their ability to change the behavior of physicians and overcome the institutional inertia of Congress and the Executive branch. The reform plans offered very little explanation as to how they will influence behavior change by those who benefit most from the health-care system, as it currently exists.

Physicians are at the center of the healthcare system. Consequently, we must make assume that they will act primarily based on self-interest that supports the status-

quo. The physician status quo is high earnings and social status. This self-interest runs counter to the assumptions put forth in the Daschle plan. Former Senator Daschle says,

> Doctors, hospitals, and other health-care providers will have to adjust to a value oriented system. In too many cases, they are providing care that doesn't reflect the latest science. That will have to change. They will have to learn to operate less like solo practitioners and more like team members, working with providers in other practices, hospitals and even states, to coordinate care. In return they will enjoy the benefits of working in a simpler, seamless system that recognizes and rewards excellent performance.[105]

It is likely that physicians are less altruistic and more concerned with their own income and quality of life.[106] Reform must resolve the conflict that exists between this self-interest and the inherent driving force for change offered by the reformers.

Institutional inertia is a significant challenge to reform. As the Medicare Part A Trust Fund heads towards insolvency, Congress, the President, and CMS have tried unsuccessfully to control costs, improve solvency, and improve the quality of care in federally funded healthcare. Despite these efforts, CMS has continued to issue Medicare funding warnings.[107] In 2007, President Bush proposed budget reforms aimed at reducing Medicare spending growth and saving more than $36 billion between 2007 and 2011.[108] The President's FY 2007 budget also proposed to improve Medicare's financial condition through programs that aimed at reducing costly medical complications and making sure patients had good outcomes, rather than just a large quantity of health-care encounters.[109] These efforts represented less than a two percent Medicare savings. In 2008, the Bush administration proposed the "Medicare Funding Warning Response Act of 2008." This Act proposed several actions to address the Medicare crisis. These actions include: implementing a national system of electronic medical records; implementing a provider pay-for-performance system in Medicare;

providing cost and quality information to Medicare beneficiaries; amending the medical malpractice liability system to include a statute of limitations and limits to recovery of non-economic and punitive damages; and establishing an income-related premium for Part D.[110] In July 2008, the House of Representatives voted to suspend consideration of this legislation for the remainder of the year.[111] President Bush's 2009 budget proposal aimed to slow the growth of Social Security, Medicare, and Medicaid. His goal was to save $208 billion over 5 years.[112]

The Centers for Medicare and Medicaid (CMS) strategic plans include pilot tests of cost saving measures, contractual competition, managed care competition, health savings accounts, reduced payments, and means testing.[113] These plans will reduce costs by $36B between 2007 and 2011. With a $12T Medicare Part A trust fund shortfall over 75 years, these efforts are inadequate.[114]

Congress, while recognizing the problem through the Congressional Budget Office and Government Accountability Office documents, has failed to take any meaningful action.[115] Legislative efforts include numerous health, balanced budget, and deficit reduction acts. These acts include: the Gramm-Rudman- Hollings Balance Budget and Emergency Deficit Control Act of 1985 (P.L 99-177); Budget and Emergency Deficit Control Reaffirmation Act of 1987 (P.L. 100-119);Budget Enforcement Act of 1990 (P.L. 101-508); The Balanced Budget Act of 1997 (P.L. 105-33); Deficit Reduction Act of 2005 Title V-Medicare (P.L 109-171), Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P. L. 108-173); Tax Relief and Health-care Act of 2006 (P.L. 109-432). None of these has effectively slowed the growth in healthcare costs. In fact, Congress may have made reform more difficult

by adding benefits. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 added a voluntary prescription drug benefit to the program, which became available in 2006 under Part D. The Medicare Improvements for Patients and Providers Act of 2008 (H.R. 6331) became law in July 2008, as Congress overrode a presidential veto. Prior to the law, Medicare beneficiaries were responsible for paying 50 percent of the approved amount for outpatient mental health services, but only 20 percent for other services. Under the new law, mental health services will enjoy the same 80-20 percent split in coinsurance by 2014. By adding benefits, Congress has increased the cost of Medicare.

As an additional resistance-to-reform signal from Congress, consider the Federal Health Board that is a common feature in all of the reform plans. Senator Charles Hagel sponsored the "Federal Health-care Board Act of 2007" that proposed the formation of this board.[116] The act lies dormant and un-visited in a Senate subcommittee.[117] Understandably, given the Federal Reserve's role in the current recession, Congress may be reluctant to empower another independent board that wields enormous economic power. Finally, it is common knowledge that Congress is also very responsive to the Medicare eligible and near eligible voters who are strongly against any reduction in Medicare benefits. Given the ineffectiveness of their past actions, it is clear that the institutional inertia of the executive and legislative branches will be hard to overcome.

Economic. The interdependence of the health-care industry and U.S. economy will make reform very challenging. This interdependence creates two challenges. The first is the challenge of finding enough federal funding to provide for current health-care needs and reform simultaneously, without upsetting the national economy. Given the

state of the economy, it appears that leaders cannot do both. The second is the challenge of reforming the huge health-care industry without destroying the industry and consequently the national economy.

Understanding the difficulty of funding health-care and reform requires explicit recognition of the current fragile status of the economy. The nation's large and growing national debt, recession, lower tax revenues, and higher unemployment will compromise ability of the nation to pay for the health-care plans already in existence. When these factors combine with the cost of war, and expanded SCHIP, Medicare Mental health and Medicare Part D pharmacy benefits, the nation will have few funds available to implement reform. Finding funds for reform will be even more difficult because none of the expanded benefits contained a realistic cost estimate. Without reform funding, health-care costs cannot be controlled. If costs cannot be controlled, universal coverage is unlikely.[118]

Upsetting the health-care industry with ineffective reform could have dire consequences for the U.S. economy. This industry represents one sixth of the entire U.S. economy.[119] Consequently, leaders should fully understand the first and second order effects of changes in policy.[120] Improving the cost efficiency of health-care delivery would have a benefit to the nation by freeing tax revenues for other purposes. However, policy makers must understand that these cost savings will affect the incomes and jobs of those currently employed in the health-care field.[121] This second order effect could have a major impact on the U.S. economy.

Conclusion and Recommendations

The nation has competing vital interests in health, defense, climate change, infrastructure, education, and energy. The longer the nation waits to address health-care the less likely the nation will be able to address the remaining issues. Delay will increase the severity, and complexity of each of these pressing issues. Right now, health-care reform requires a substantial financial investment that, given the recession, will likely come from the nation's discretionary spending pool. The choices that now face our legislators are less defense spending, less domestic spending, raising taxes, or a combination of the three.[122] Reform is necessary now, not to stave off crisis, but to lessen its severity. Successfully reform requires ten critical actions: (1) create and empower a health-care board; (2) provide universal coverage; (3) define a basic benefits package and subsidize it; (4) create and empower a standards board, through it, control the insertion of technology; (5) invest in EHR infrastructure and mandate its use; (6) increase the government share of responsibility for healthcare to mirror other industrialized nations of the world; (7) develop and track national health performance measures; (8) implement incentives and disincentives for lifestyle choices that raise health-care costs; (9) reform medical education to ensure that there are enough providers to meet demand; (10) overcome political impediments by voting for meaningful action from our legislators. A piecemeal attempt at reform will fail; it requires a cohesive plan to address the entire system. Anything less will make matters worse for Americans.

Endnotes

[1] U.S. Government Accountability Office, *The Nation's Long-Term Fiscal Outlook September 2008 Update* (Washington, DC: U.S. Government Accountability Office, September 2008), 2.

[2] U.S. Government Accountability Office, *The Nation's Long-Term Fiscal Outlook April 2008 Update* (Washington, DC: U.S. Government Accountability Office, April 2008), 1.

[3] Ibid.

[4] National Intelligence Council, "Global Trends 2025: A Transformed World," http://www.dni.gov/nic/PDF_2025/2025_Global_Trends_Final_Report.pdf (accessed November 30, 2008),21.

[5] Douglas Brook and Philip Candreva, "Business Management Reform in the Department of Defense in Anticipation of Declining Budgets," *Public Budgeting & Finance* 27, no. 3 (Fall 2007), 50-51.

[6] U.S. Government Accountability Office, Fiscal Outlook April 2008, 3.

[7] President George W. Bush, "The Budget Message of the President," memorandum for the general public, Washington, DC, 4 February 2008. http://www.whitehouse.gov/omb/budget/fy2009/message.html. (accessed 9 November 2008).

[8] Alice Park, "America's Health Checkup," *Time* (December 1, 2008), 42.

[9] Thomas Daschle, Scott Greenberger, and Jeanne Lambrew, *Critical: What We Can Do About the Health-Care Crisis (*New York: Thomas Dunne Books, 2008), 139.

[10] Kaiser Family Foundation, "Health Research and Educational Trust, Employer Health Benefits 2006 Annual Survey," http://www.kff.org/insurance/7527/index.cfm (accessed December 7, 2008), 1.

[11] Frank A. DiStasio, *Fiscal Year 2009 – Army Budget – An Analysis* (Arlington, VA: The Association of the United States Army, 2008), 13.

[12] Gene Dodaro, *Long-Term Federal Fiscal Challenge Driven Primarily by Healthcare* (Washington, D.C.: Government Accountability Office, 2008), 17.

[13] Daschle, Critical: Health Care Crisis,178.

[14] Ibid, xiii.

[15] Ibid, 118.

[16] Centers for Medicare and Medicaid, *Strategic Action Plan for 2006 – 2009: Achieving A Transformed And Modernized Health-care System For The 21st Century* (Baltimore, MD: Centers for Medicare & Medicaid Services, October 16, 2006), 6.

[17] Henry M. Paulson, Jr., *1998- 2008 Annual Report Of The Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds* (Washington, DC: Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds, 2008), 2. (accessed at http://www.cms.hhs.gov/ReportsTrustFunds/ on November 6, 2008)

[18] The Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds, "The 2008 Annual Report Of The Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds," (Washington, DC: The Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds, 2008), 3.

[19] DiStasio, 2009 Army Budget Analysis, 8.

[20] Bureau of Public Debt, "The Debt to the Penny and Who Holds It," linked from the *Bureau of Public Debt Home Page* at "See The U.S. Debt to the Penny," http://www.treasurydirect.gov/NP/BPDLogin?application=np (accessed December 9, 2008)

[21] DiStasio, 2009 Army Budget Analysis, 8. In figure 8, 2008 GDP is $14.312T. GDP divided by $10.266 is 0.72 or 72%.

[22] Tony Allison, "The Boomers are Coming, The Boomers are Coming -Demographic Tsunami is at the Gate," Financial Sense WrapUp, October 15, 2007, http://www.financialsense.com/Market/allison/2007/1015.html (accessed September 26, 2008).

[23] Associated Press, "Paulson Resists Extra Bailout Help," *The Frederick* (MD) *News-Post*, September 22,, 2008.

[24] Allison, "The Boomers are Coming.

[25]U.S. Government Accountability Office, *The Nation by the Numbers: A Citizen's Guide A Summary of the FY 2007 Financial Report of the U.S. Government.* (Washington, DC: U.S. Government Accountability Office, 2007), 3.

[26] Max Bacus, "Call to Action:Health Reform 2009," November 12, 2008, http://www.finance.senate.gov/healthreform2009/finalwhitepaper.pdf (accessed November 20, 2008).

[27] Daschle, Critical: Health Care Crisis,4.

[28] Central Intelligence Agency, "Rank Order – Life Expectancy at Birth," November 20, 2008 https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html (accessed 20 November 2008).

[29] Institute of Medicine, "The Chasm in Quality: Select Indicators from Recent Reports," May 30, 2006, http://www.iom.edu/CMS/8089/14980.aspx (accessed December 7, 2008)

[30] Barack Obama, "Barack Obama And Joe Biden's Plan To Lower Health-care Costs And Ensure Affordable, Accessible Health Coverage For All," no date, http://www.barackobama.com/pdf/issues/HealthCareFullPlan.pdf (accessed 9 November 2008).

[31] Victor R. Fuchs, “Medicare reform: The larger picture,” *The Journal of Economic Perspectives* 14, no. 2 (Spring 2000), 57.

[32] Medicare Steering Committee of the Health Practice Council, *Medicare Reform Options* (Washington, DC: American Academy of Actuaries, June 2007), 10.

[33] Daschle, Critical: Health Care Crisis,51-58.

[34] Ibid,183.

[35] Ibid,118.

[36] Ibid,xiii.

[37] Ibid,xiii.

[38] Ibid,131.

[39] Ibid,131.

[40] Ibid,168.

[41] Ibid,170.

[42] Ibid,170.

[43] Ibid,170.

[44] Ibid,119.

[45] Institute of Medicine, “Insuring America's Health: Principles and Recommendations,” January 14, 2004, http://www.iom.edu/CMS/3809/4660/17632.aspx (accessed December 16, 2008).

[46] Daschle, Critical: Health Care Crisis,131.

[47] Ibid,171.

[48] Ibid,145.

[49] Ibid,171.

[50] Ibid,146-147.

[51] Ibid,149.

[52] Ibid,149-155.

[53] Ibid,174-5.

[54] Ibid,158.

[55] Ibid,178.

[56] Ibid,178.

[57] Ibid,178.

[58] Ibid,158.

[59] Ezekiel Emanuel and Victor Fuchs, “A Comprehensive Cure: Universal Health-care Vouchers,” July 2007, http://www.brookings.edu/papers/2007/~/media/Files/rc/papers/2007/07useconomics_emanuel/200707emanuel_fuchs.pdf (Accessed October 12, 2008) 10.

[60] Daschle, Critical: Health Care Crisis,174.

[61] Ibid,157.

[62] Ibid,156.

[63] Ibid,160.

[64] Ibid,176.

[65] Ibid,176.

[66] Emanuel and Fuchs, “A Comprehensive Cure,”8.

[67] Daschle, Critical: Health Care Crisis,162-164.

[68] Ibid,162-164.

[69] Ibid,164-168.

[70] Ibid,165-166.

[71] Ibid,166.

[72] Ibid,166.

[73] Ibid,165-166.

[74] Ibid,32.

[75] Ibid,32-35.

[76] “Healthy People 2010 – Progress Reviews,”June 2006, http://www.healthypeople.gov/Document/HTML/uih/uih_4.htm (accessed October 30, 2010).

[77] Fuchs, “Medicare reform: larger picture,” 58.

[78] Kenneth I. Kaitin ed.,"Out of pocket cost of biopharmaceutical research and development is $559 million" *Tufts Center for the Study of Drug Development Impact Report* 8, no. 6 (November/December 2006) 1.

[79] Emanuel and Fuchs, "A Comprehensive Cure,"12.

[80] Office of Disease Prevention and Health Promotion, "Healthy People 2010 – Progress Reviews,"June 2006, http://www.healthypeople.gov/Document/HTML/uih/uih_4.htm (accessed October 30, 2008).

[81] Office of Disease Prevention and Health Promotion, "Healthy People 2010."

[82] Office of Disease Prevention and Health Promotion, "Healthy People 2010."

[83] Department of Health and Human Services, "The Surgeon General's Call To ActionTo Prevent and Decrease Overweight and Obesity 2001," 2001, http://www.surgeongeneral.gov/topics/obesity/ (accessed December 13, 2009)

[84] Office of Disease Prevention and Health Promotion, "Healthy People 2010."

[85] Gene Dodaro, *Long-Term Federal Fiscal Challenge Driven Primarily by Healthcare* (Washington, D.C.: Government Accountability Office, 2008), 17.

[86] Paul Hogan, Tim Dall, and Plamen Nikolov, "Economic costs of diabetes in the US in 2002," *Diabetes Care* 26, no. 3 (March 2003), 917.

[87]David S Ludwig, "Childhood Obesity - The Shape of Things to Come," *The New England Journal of Medicine* 357, no. 23 (December 6, 2007), 2325.

[88]Ibid.

[89]Ibid.

[90] Association of American Medical Colleges, "AAMC Statement on the physician workforce", June 2006, http://www.aamc.org/workforce/workforceposition.pdf (accessed December 13, 2008)

[91] David Goodman, "Improving Accountability for the Public investment in Health Profession Education. It's time to Try Health Workforce Planning," *JAMA* 300, no. 10 (September 10, 2008), 1205.

[92] Ibid.

[93] Dennis Cauchon, "Medical miscalculation creates doctor shortage", *USA Today*, March 2, 2005.

[94] Ibid.

[95] Ibid.

[96] Ibid.

[97] Mark Ebell, “Choice of specialty: it’s money that matters in the USA,” *JAMA* 262, no. 12 (September 22-29, 1989), 1630.

[98] Ibid, 1131-1132.

[99] David Goodman and Elliott Fisher, “Physician workforce crisis? Wrong diagnosis, wrong prescription,” *New England Journal of Medicine* 358, no. 16 (March 2008), 1658-1661.

[100] Ibid.

[101] James Macinko , Barbara Starfield , and Leiyu Shi, “Quantifying the health benefits of primary care physician supply in the United States, *International Journal of Health Services* 37, no. 1 (2007) 111.

[102] Cauchon, “Medical miscalculation doctor shortage.”

[103] Steven Simoens and Jeremy Hurst, “The supply of Physicians Services in OECD countries,” January 2006, *Organization for Economic Cooperation and Development* http://www.oecd.org/dataoecd/27/22/35987490.pdf (accessed 22 September 2008) 29.

[104] Goodman, “Improving Accountability,”1207.

[105] Daschle, Critical: Health Care Crisis,166.

[106]Barbara Weiss, “Primary care? Not me,” *Medical Economics* 79, no. 14 (Jul 26, 2002), 42.

[107] Henry M. Paulson, Jr., *2008 Annual Report Of The Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds* (Washington, DC: Boards Of Trustees Of The Federal Hospital Insurance And Federal Supplementary Medical Insurance Trust Funds, 2008), 2.

[108] Centers for Medicare and Medicaid, Strategic Action Plan, 28.

[109] Ibid.

[110] Paulson, Jr., *2008 Annual Report ,* 3.

[111] The Henry J. Kaiser Family Foundation, “Medicare Spending and Financing,” September 2008, http://www.kff.org/medicare/upload/7305_03.pdf (accessed 9 November 2008).

[112] Bush, “Budget Message,” http://www.whitehouse.gov/omb/budget/fy2009/message.html.

[113] Centers for Medicare and Medicaid, Strategic Action Plan, 28-29.

[114] Medicare Steering Committee of the Health Practice Council, *Medicare Reform Options* (Washington, DC: American Academy of Actuaries, June 2007), 5.

[115] Congressional Budget Office, *The Budget and Economic Outlook:An Update*, (Washington, DC: Congressional Office, September 2008), 7.

[116] Chuck Hagel, September 27, 2007, Federal Health-care Board Act of 2007, http://www.thomas.gov/cgi-bin/bdquery/z?d110:s.02105: (accessed 1 October 2008).

[117] Hagel, "Federal Health-care Board Act."

[118] Committee for Economic Development, "Quality, Affordable Health-care for All," 2007, http://www.ced.org/docs/report/report_healthcare200710.pdf (accessed October 1, 2008), 53.

[119] Ibid, 7.

[120] Ibid,49.

[121] Ibid.

[122] DiStasio, 2009 Army Budget Analysis, 27.